Course Catalogue
Winter Semester 2023/24

Version: 16 October 2023

Website: polver.uni.kn/seds

Postal address
University of Konstanz
Department of Politics and Public Administration
78457 Konstanz
Germany

Course Advice for Students of the
Master's Program in Social and Economic Data Science
Katharina Arendt
Room: D328
+49 (0)7531 88-4494
seds.admin@uni-konstanz.de

Office Hours during lecture period
Tuesday, 11-12 am, online via zoom
Wednesday, 1.30-3 pm, on-site in D328 with appointment

Student Course Guidance
Zoé Wolter
seds.msc@uni-konstanz.de
**Dates of the winter semester 2023/24**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of term</td>
<td>01.10.2023</td>
</tr>
<tr>
<td>End of term</td>
<td>31.03.2024</td>
</tr>
<tr>
<td>Registration for lectures and seminars for winter semester (differ between departments)</td>
<td>See “basic data” of respective courses on ZEuS or departments’ websites</td>
</tr>
<tr>
<td>Beginning of lectures</td>
<td>23.10.2023</td>
</tr>
<tr>
<td>End of lectures</td>
<td>10.02.2024</td>
</tr>
<tr>
<td>Lecture-free period around Christmas</td>
<td>23.12.2023 – 07.01.2024</td>
</tr>
<tr>
<td>Examination period</td>
<td>February 2023</td>
</tr>
<tr>
<td>Resit examination period</td>
<td>March/April 2023</td>
</tr>
<tr>
<td>Registration periods for exams and resit exams (differ between departments)</td>
<td>Click here</td>
</tr>
</tbody>
</table>

Further details regarding **semester dates** are available on the following website. Please note that the only fully reliable information on the **exam dates** can be found on ZEuS.

**Important information:**

The Master’s Programme in Social and Economic Data Science is an interdisciplinary program where you attend classes in various departments. Therefore, please always double check the information regarding coursework and exams via ZEuS.

**Registration for courses:**
Please note, that students must register via ZEuS for the courses they want to attend during the semester. Here you can find a guideline how to register for the courses. Please take care of the different registration deadlines of the participating departments. You will find further details on ZEuS or on the respective departments’ websites.

**Registration for exams:**
Please, also register for exams via ZEuS. An explanation how to generate your TANs in ZEuS, may be found in the ZEuS-Wiki. Should you have any problems registering for exams, please contact the ZEuS support team: zeus.support@uni-konstanz.de.
Preparatory courses for new master's students (free of charge)

Offered in October 2023.

Department of Politics and Public Administration

Python Crash Course / Introduction to Programming with Python
Indira Senn et al
Can be credited in the module “Programming and Scripting” (p. 10)
16/10/2023 – 20/10/2023 (all-day) in room C358 and D406.
See: ZEuS

Prep Course: Research Methods and Statistics
M. Herrmann
09/10/2023 – 20/10/2023 (Mon, Wed, Fri, 10.00 to 13:15 in room L602)
See: ZEuS

Department of Economics

Prep Course: Econometrics
N. Zubanov
12/10/2023 – 13/10/2023, 2.00 – 5.30 PM, R512
16/10/2023 – 18/10/2023, 2.00 – 5.30 PM, R512
20/10/2023, 11.00 AM – 6.00 PM, Y311

Prep Course: Quantitative Methods in Economics
B. Kasberger
11/10/23 – 13/10/23 and 16/10/2023 – 18/10/2023, 10.00 AM – 1.00 PM, M627

Department of Computer Sciences

Kompaktkurs Mathematik 1 (Duration: 5 days, German only)
S. Kosub
09/10/23, 2:30 – 4.45 PM, R513
10/10/23 – 13/10/23, 9.00 AM – 4.45 PM, R513
See: ZEuS
Table of Content

1. Introduction to Computation for the Social Sciences .......................................................... 4
2. Foundations of Data Science ................................................................................................. 4
   a. Focus Area: Computer Sciences ..................................................................................... 4
   b. Focus Area: Mathematics ............................................................................................... 5
   c. Focus Area: Social-Scientific Methods ......................................................................... 7
   d. Focus Area: Statistics ..................................................................................................... 8
3. Advanced Methods: Computer Science ............................................................................... 8
   a. Advanced Methods: Statistics ....................................................................................... 10
4. Programming and Scripting ................................................................................................. 11
5. Social Science Applications ............................................................................................... 11
6. Timetable: Foundations of Data Science ........................................................................... 13

1. Introduction to Computational Methods for the Social Sciences

Introduction to Computation for the Social Sciences, 9cr D. Garcia
Mo, 13:30 – 16:00 PM, F425
See: ZEuS
Tutorial (2 hours), 2 groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Day</th>
<th>Time</th>
<th>Frequency</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>E402</td>
</tr>
<tr>
<td>2</td>
<td>Thu</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>G307</td>
</tr>
<tr>
<td>3</td>
<td>Fri</td>
<td>10:00 AM - 11:30 AM</td>
<td>Weekly</td>
<td>D433</td>
</tr>
<tr>
<td>4</td>
<td>Fri</td>
<td>10:00 AM - 11:30 AM</td>
<td>Weekly</td>
<td>D201</td>
</tr>
</tbody>
</table>

Please note: In preparation for “Introduction to Computation for the Social Sciences” we advise all new MSc SEDS Students to take the Python Crash Course in October.

2. Foundations of Data Science

FOCUS AREA: Computer Sciences

Konzepte der Informatik, 6cr B. Pampel
Mon, 11:45 AM - 13:15 PM, R711
Tue, 10:00 AM - 11:30 AM, R711
See: ZEuS
Tutorial (2 hours), 6 groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Day</th>
<th>Time</th>
<th>Frequency</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thu</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>P602</td>
</tr>
<tr>
<td>2</td>
<td>Thu</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>D433</td>
</tr>
<tr>
<td>3</td>
<td>Fri</td>
<td>10:00 AM - 11:30 AM</td>
<td>Weekly</td>
<td>D433</td>
</tr>
<tr>
<td>4</td>
<td>Fri</td>
<td>10:00 AM - 11:30 AM</td>
<td>Weekly</td>
<td>D201</td>
</tr>
</tbody>
</table>
### Group 5
- **Day:** Fri
- **Time:** 13:30 PM – 15:00 PM
- **Frequency:** Weekly
- **Location:** M630

### Group 6
- **Day:** Fri
- **Time:** 13:30 PM – 15:00 PM
- **Frequency:** Weekly
- **Location:** M628

*Only in combination with:*

**Programmierkurs I (Imperative Sprache)**, 6cr  
M. Grossniklaus / S. Storanndt  
**Time:** Tue, 13:30 PM – 15:00 PM, R711  
See: ZEuS (registration via ILIAS mandatory)  
Tutorials (2 hours), 6 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Thu</th>
<th>11:45 AM – 13:15 PM</th>
<th>Weekly</th>
<th>M628</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Thu</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>F429</td>
</tr>
<tr>
<td>Group 3</td>
<td>Thu</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>M630</td>
</tr>
<tr>
<td>Group 4</td>
<td>Thu</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>ML630</td>
</tr>
<tr>
<td>Group 5</td>
<td>Thu</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>ML630</td>
</tr>
<tr>
<td>Group 6</td>
<td>Fri</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>P602</td>
</tr>
</tbody>
</table>

**Data Mining: Basic Concepts**, 6cr  
D. Keim  
**Time:** Thu, 11:45 AM – 13:15 PM, G201  
See: ZEuS  
Tutorial (2 hours), 3 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>11:45 AM – 13:15 PM</th>
<th>Weekly</th>
<th>ZT1202</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
</tbody>
</table>

**FOCUS AREA: Mathematics**

**Diskrete Mathematik und Logik**, 9cr  
B. Goldlücke  
**Time:** Mon, 10:45 AM – 11:30 AM, M629  
See: ZEuS  
Tutorial (2 hours), 6 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>10:00 AM – 11:30 AM</th>
<th>Weekly</th>
<th>D433</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>E402</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>ML630</td>
</tr>
<tr>
<td>Group 4</td>
<td>Wed</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>ML630</td>
</tr>
<tr>
<td>Group 5</td>
<td>Thu</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>E402</td>
</tr>
<tr>
<td>Group 6</td>
<td>Thu</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>C424</td>
</tr>
</tbody>
</table>
Lineare Algebra I, 6+3cr  
Mon, 10:00 AM – 11:30 AM, R712  
Thu, 10:00 AM – 11:30 AM, R712  
See: ZEuS  
Tutorial (2 hours), 1 group

<table>
<thead>
<tr>
<th>Group 1</th>
<th>tba</th>
<th>tba</th>
<th>Weekly</th>
</tr>
</thead>
</table>

Mathematik für Wirtschaftswissenschaftler*innen I, 9cr  
Mon, 10:00 AM – 11:30 AM, R711  
Thu, 10:00 AM – 11:30 AM, R711  
See: ZEuS  
Tutorial (2 hours), 9 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Mon</th>
<th>10:00 AM – 11:30 AM</th>
<th>Weekly</th>
<th>K503</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Mon</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>G309</td>
</tr>
<tr>
<td>Group 3</td>
<td>Tue</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>K503</td>
</tr>
<tr>
<td>Group 4</td>
<td>Tue</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>K503</td>
</tr>
<tr>
<td>Group 5</td>
<td>Wed</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>K503</td>
</tr>
<tr>
<td>Group 6</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>R511</td>
</tr>
<tr>
<td>Group 7</td>
<td>Thu</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>K503</td>
</tr>
<tr>
<td>Group 8</td>
<td>Fri</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>M627</td>
</tr>
<tr>
<td>Group 9</td>
<td>Fri</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
</tbody>
</table>

Datenmathematik, 9cr  
Tue, 15:15 PM – 16:45 PM, R512  
Thu, 13:30 PM – 15:00 PM, R513  
See: ZEuS  
Tutorial (2 hours), 4 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>13:30 PM – 15:00 PM</th>
<th>Weekly</th>
<th>L602</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>F429</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>M630</td>
</tr>
<tr>
<td>Group 4</td>
<td>Thu</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>E403</td>
</tr>
</tbody>
</table>

Mathematics for Political Science, 7cr  
Mon, 17:00 PM – 18:30 PM, C358  
See: ZEuS
**FOCUS AREA: Social-Scientific Methods**

*Introduction to Survey Methodology*, 6cr lecture + 3cr tut
Thu, 11:45 AM – 13:15 PM, G300
See: ZEuS
Tutorial (2 hours), 3 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Tue</th>
<th>08:15 AM – 09:45 AM</th>
<th>Weekly</th>
<th>G421</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>Z1003</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>F424</td>
</tr>
</tbody>
</table>

*Research Design I: Research Design and Causal Inference*, 9cr
Tue, 11:45 AM – 13:15 PM, weekly, D301
Tue, 11:45 AM – 13:15 PM, weekly, G421
Tue, 11:45 AM – 13:15 PM, weekly, E402
Tue, 11:45 AM – 13:15 PM, weekly, D432
See: ZEuS

*Empirical Research Methods*, 9cr
Tue, 11:45 AM – 13:15 PM, Konzil1
Tue, 13:30 PM – 15:00 PM, Konzil1
See: ZEuS

*Empirie: Quantitative Methoden*, 6cr
Tue, 11:45 PM – 13:15 PM, R513
See: ZEuS
Tutorial (2 hours), 6 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>10:00 AM – 11:30 AM</th>
<th>Weekly</th>
<th>D301</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>F427</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>H304</td>
</tr>
<tr>
<td>Group 4</td>
<td>Thu</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>G227a</td>
</tr>
<tr>
<td>Group 5</td>
<td>Thu</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>G421</td>
</tr>
<tr>
<td>Group 6</td>
<td>Thu</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>H304</td>
</tr>
</tbody>
</table>

*Methoden & Geschichte der Psychologie*, 5cr
Mon, 15:15 PM – 16:45 PM, R711
Mon, 17:00 PM – 18:30 PM, R711
See: ZEuS
Tutorial (2 hours), 6 groups

**FOCUS AREA: Statistics**

*Statistics 1 (PSY)*, 5cr
Y. Shevchenko / M. Miccoli
Tue, 11:45 AM – 13:15 PM, R712
Wed, 13:30 PM – 15:00 PM, R712
See: ZEuS
Statistics 1 (ECO), 6cr  
R. Brüggemann  
Mon, 13:30 PM – 15:00 PM, R513  
See: ZEuS  
Tutorial (2 hours), 6 groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Day</th>
<th>Time</th>
<th>Frequency</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Tue</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>R511</td>
</tr>
<tr>
<td>Group 2</td>
<td>Tue</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>M627</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>G227a</td>
</tr>
<tr>
<td>Group 4</td>
<td>Wed</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>L602</td>
</tr>
<tr>
<td>Group 5</td>
<td>Thu</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>R512</td>
</tr>
<tr>
<td>Group 6</td>
<td>Thu</td>
<td>17:00 PM – 18:30 PM</td>
<td>Weekly</td>
<td>G227</td>
</tr>
<tr>
<td>Group 7</td>
<td>Fri</td>
<td>08:15 AM – 09:45 AM</td>
<td>Weekly</td>
<td>G530</td>
</tr>
<tr>
<td>Group 8</td>
<td>Fri</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>G530</td>
</tr>
</tbody>
</table>

Datenmathematik, 9cr  
T. Sutter  
See Focus Area: Mathematics

3. Advanced Methods: Computer Science

Konzepte der Programmierung, 6cr  
M. Grossniklaus  
Mon, 17:00 PM – 18:30 PM, R513  
Tue, 17:00 PM – 18:30 PM, R611  
See: ZEuS  
Tutorial (2 hours), 4 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Day</th>
<th>Time</th>
<th>Frequency</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Tue</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>P602</td>
</tr>
<tr>
<td>Group 2</td>
<td>Tue</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>M628</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>10:00 AM – 11:30 AM</td>
<td>Weekly</td>
<td>M627</td>
</tr>
<tr>
<td>Group 4</td>
<td>Wed</td>
<td>11:45 AM – 13:15 PM</td>
<td>Weekly</td>
<td>D201</td>
</tr>
</tbody>
</table>

Only in combination with:

Programmierkurs III, 3cr  
G. Diatzko  
Mon, 15:15 PM – 16:45 PM, R512  
See: ZEuS

Data Visualization: Advanced Topics, 6cr  
J. Fuchs  
Tue, 10:00 AM – 11:30 AM, ZT1202  
See: ZEuS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Day</th>
<th>Time</th>
<th>Frequency</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Fri</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
</tbody>
</table>
### Data Mining: Basic Concepts, 6cr
Thu, 11:45 AM – 13:15 PM, G201
See: ZEuS
Tutorial (2hours), 3 groups

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>11:45 AM – 13:15 PM</th>
<th>Weekly</th>
<th>ZT1202</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>13:30 PM – 15:00 PM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
<tr>
<td>Group 3</td>
<td>Wed</td>
<td>15:15 PM – 16:45 PM</td>
<td>Weekly</td>
<td>ZT1202</td>
</tr>
</tbody>
</table>

### Word Representations and Language Models, 6cr
A. Spitz
Mon, 11:45 AM – 13:15 PM, ZT702
Thu, 10:00 AM – 11:30 AM, ZT702
See: ZEuS

### Geographic Information Systems, 6cr
D. Keim
Tue, 13:30 PM – 15:00 PM, ZT1202
See: ZEuS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Fri</th>
<th>11:45 AM – 13:15 PM</th>
<th>Weekly</th>
<th>M630</th>
</tr>
</thead>
</table>

### Algorithm Engineering, 6cr
S. Storandt
Digital self-study (semester course)
See: ZEuS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>10:00 AM - 11:30 AM</th>
<th>Weekly</th>
<th>G530</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Wed</td>
<td>11:45 AM - 1:15 PM</td>
<td>Weekly</td>
<td>C424</td>
</tr>
</tbody>
</table>

### Applications for Powerwall and Virtual Reality Environments, 6cr
D. Keim
Wed, 17:00 PM – 18:30 PM, ZT1202
See: ZEuS

### Randomized Algorithms, 6cr
S. Storandt
Digital self-study (semester course)
See: ZEuS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Tue</th>
<th>11:45 AM - 1:15 PM</th>
<th>Weekly</th>
<th>P602</th>
</tr>
</thead>
</table>

### Seminar Data Analysis and Visualization, 3cr.
M. Miller/ D. Keim
Tue, 15:15 PM – 16:45 PM, ZT1202
See: ZEuS

### Image Analysis II: 3D and Motion Reconstruction, 6cr
B. Goldlücke
Wed, 10:00 AM – 11:30 AM, P602
See: ZEuS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Wed</th>
<th>10:00 AM - 11:30 AM</th>
<th>Weekly</th>
<th>tba</th>
</tr>
</thead>
</table>
4. Advanced Methods: Statistics

**Statistical Learning**, 6cr  
26.01.2024 – 16.02.2024  
Fri, 09:00 AM – 13:15 PM, E402  
Fri, 13:30 PM – 15:00 AM, G310  
See: [ZEuS](#)

**Statistical Analysis of Social Networks**, 3cr  
04.03.2024 – 19.03.2024  
Mon, 08:15 AM – 13:15 PM, D433 and 13:30 – 18:30, G310  
Tue, 08:15 AM – 13:15 PM, D433 and 13:30 – 18:30, G310  
See: [ZEuS](#)

**Event History/Sequence Analysis**, 7cr  
Mon, 11:45 AM – 13:15 PM, D433  
See: [ZEuS](#)

**Advanced Time Series Analysis**, 8cr  
Mon, 10:00 AM - 11:30 AM, Y311  
Fri, 10:00 AM - 11:30 AM, F429  
See: [ZEuS](#)

**Advanced Econometrics**, 3 hours, 10cr  
Tue, 8:15 AM - 9:45 AM, G530  
Wed, 8:15 AM - 9:45 AM, G530  
See: [ZEuS](#)

<table>
<thead>
<tr>
<th>Tutorial (2 hours), 1 group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
</tr>
<tr>
<td>Group 2</td>
</tr>
</tbody>
</table>

**Regression Analysis**, 6cr  
Fri, 10:00 AM -11:30 AM, F427  
See: [ZEuS](#)

**Datenmathematik**, 9cr  
See Focus Area: Mathematics  
T. Sutter

5. Programming and Scripting

**Python Crash Course / Introduction to Programming with Python**  
Indira Senn et al  
16/10/2023 – 20/10/2023 (all-day) in room C358 and D406.  
See: [ZEuS](#)

Please note: This course is recommended as preparation for “Introduction to Computation for the Social Sciences”.

**Data Analysis with R (in German)**, 7cr  
Thu, 10:00 AM – 11:30 AM, BS217  
See: [ZEuS](#)
Data Analysis mit R (in German), 7cr
Thu, 11:45 AM - 1:15 PM, BS217
See: ZEuS

Programmierkurs I (Imperative Sprache), 6cr
See Focus Area: Computer Sciences

Programmierkurs III, 2 hours, 3cr
See Advanced Methods: Computer Sciences

R Bootcamp (Blockcourse), 6cr  M. Meier
Single date, Fri, 01/12/2023, 13:30 PM – 18:00 PM, ZfP 310 Seminarraum Haus 35 DG
Single date, Sat, 02/12/2023, 09:00 AM – 15:00 PM, ZfP 310 Seminarraum Haus 35 DG
Single date, Fri, 15/12/2023, 13:30 PM – 18:00 PM, ZfP 310 Seminarraum Haus 35 DG
Single date, Sat, 16/12/2023, 09:00 AM – 15:00 PM, ZfP 310 Seminarraum Haus 35 DG
See: ZEuS

6. Social Science Applications

Strukturgleichungsmodelle, 4cr  D. Jendryczko
Wed, 10:00 AM – 11:30 AM, F429
See: ZEuS

Statistical Analysis of Social Networks, 3cr  T. Shafiei
04.03.2024 – 19.03.2024
Mon, 08:15 AM – 13:15 PM, D433, and 13:30 – 18:30, G310
Tue, 08:15 AM – 13:15 PM, D433 and 13:30 – 18:30, G310
See: ZEuS

Statistical Learning, 6cr  T. Shafiei
26.01.2024 – 16.02.2024
Fri, 09:00 AM – 13:15 PM, E402
Fri, 13:30 PM – 15:00 AM, G310
See: ZEuS

The Social Informatics of Large Language Models, 6cr  D. Garcia
Tue, 10:00 AM – 11:30, Y311
See: ZEuS

Measurement of Inequality, 6cr  M. Buis
Wed, 10:00 AM – 11:30 AM, E402
See: ZEuS

Regression Analysis, 6cr  M. Buis
Fri, 10:00 AM -11:30 AM, F427
See: ZEuS
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>- Lineare Algebra I</td>
<td>- Konzepte der Informatik</td>
<td></td>
<td></td>
<td>- Lineare Algebra I</td>
</tr>
<tr>
<td>11:30</td>
<td>- Diskrete Mathematik und Logik</td>
<td></td>
<td></td>
<td></td>
<td>- Mathematik für Wirtschaftswissenschaftler*innen I</td>
</tr>
<tr>
<td>11:45</td>
<td>- Konzepte der Informatik</td>
<td></td>
<td></td>
<td></td>
<td>- Data Mining: Basic Concepts</td>
</tr>
<tr>
<td>13:15</td>
<td></td>
<td>- Research Design I: Research Design and Causal Inference</td>
<td></td>
<td></td>
<td>- Introduction to Survey Methodology</td>
</tr>
<tr>
<td>13:30</td>
<td>- Introduction to Computation for the Social Sciences</td>
<td>- Programmierkurs I</td>
<td></td>
<td></td>
<td>- Datenmathematik</td>
</tr>
<tr>
<td>15:00</td>
<td>- Statistics 1 (ECO)</td>
<td>- Empirical Research Methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:15</td>
<td>- Introduction to Computation for the Social Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:45</td>
<td>- Methoden &amp; Geschichte der Psychologie</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:00</td>
<td>- Mathematics for Political Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:30</td>
<td>- Methoden &amp; Geschichte der Psychologie</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>